

Amendment to the Claims:

1. (Currently Amended) [[Two]] A two-shaft vacuum pump comprising:

first and second rotor [[two]] shafts, [[(12,14),]] wherein one of the shafts (14) is driven by

5 an electric drive motor [[(20)]] and comprises a motor rotor [[(26)]] which drives one of the motor shafts, the drive motor [[(20)]] being a synchronous motor[[,]] e h a r a c t e r i z e d i n t h a t the with a motor rotor [[(26)]] that is permanently excited, and

10 a synchronous motor power-limiting device [[(58)]] is provided which limits [[the]] motor power (P_M) to a fixed maximum motor power ($P_{M\max}$) in a limiting range above a fixed rated motor speed (n_N).

2. (Currently Amended) [[Two]] The two-shaft vacuum pump according to claim 1, characterized in that wherein the power-limiting means [[(58)]] adjusts, in the limiting range, [[the]] a phase angle between [[the]] a magnetic field of the rotor and [[the]] an electrical stator field to an angle other than 90°.

3. (Currently Amended) [[Two]] The two-shaft vacuum pump according to claim 1, characterized in that wherein the power-limiting means device [[(58)]] reduces the stator current in the limiting range.

4. (Currently Amended) [[Two]] The two-shaft vacuum pump according to claim 1 [[or 2]], characterized in that wherein the power-limiting device [[(58)]] adjusts, in the limiting range, the phase angle between the magnetic field of the rotor and at least one of the electrical stator field and[[/or]] the stator current as a function of the motor speed.

5. (Currently Amended) [[Two]] The two-shaft vacuum pump according to one of claims claim 1[-4], characterized in that wherein the driven rotor shaft [[(14)]] driven by the drive motor is of overhung cantilevered configuration and is supported without a supporting bearing on [[the]] a motor-side end.

6. (Currently Amended) [[Two]] The two-shaft vacuum pump according to ~~one of claims~~ claim 1[-5]], characterized in that wherein the motor rotor [[(26)]] comprises a plurality of permanent magnets [[(38)]] arranged on [[the]] an outside surface of the motor rotor body [[(34)]].

7. (Currently Amended) [[Two]] The two-shaft vacuum pump according to claim 6, characterized in that wherein the motor rotor [[(26)]] comprises a rotor enclosure [[(40)]] of a nonmagnetic material which externally encloses the motor rotor body [[(34)]] and the plurality of permanent magnets [[(38)]].

8. (Currently Amended) [[Two]] The two-shaft vacuum pump according to ~~one of claims~~ claim 1[-7]], characterized in that wherein on [[the]] a stator side, a can [[(42)]] of a nonmagnetic material is provided which gas-tightly seals the motor rotor [[(26)]] with respect to the motor stator [[(28)]].

9. (Currently Amended) [[Two]] The two-shaft vacuum pump according to claim 8, characterized in that wherein a pump cover [[(48)]] holding the can [[(42)]] and a stator casing [[(50)]] surrounding the stator casing [[(50)]] are integrally formed.

10. (Currently Amended) [[Two]] The two-shaft vacuum pump according to ~~one of claims~~ claim 7[-9]], characterized in that wherein at least one of the plurality of permanent magnets [[(38)]] of the rotor are made of include rare earth[[s]] elements.

11. (Previously Presented) A two-shaft vacuum pump comprising:

a pair of motor shafts;

5 a synchronous, permanently excited drive motor directly connected to one of the motor shafts; and

a phase angle adjusting means for adjusting a phase angle between a motor rotor magnetic field and at least one of a motor stator magnetic field and a stator current.